

**BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA**

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APPLICATION TO CHANGE WATER RIGHT NO. 43P 30149944 BY VERNARD MELVILLE	}	PRELIMINARY DETERMINATION TO GRANT CHANGE
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On October 6, 2020, the Estate of Vernard Melville (Applicant) submitted Application to Change an Existing Irrigation Water Right No. 43P 30149944 to change Provisional Permit No. 43P 86260-00 to the Billings Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). A.L. Melville, Personal Representative for the Estate of Vernard Melville, signed the affidavit on the Application. The Department published receipt of the Application on its website. The Application was determined to be correct and complete as of February 10, 2021.

The Department met by conference call with the Applicant's representative on September 24, 2020, for a pre-application meeting. Mark Elison and Jill Lippard were present for the Department. The Applicant was represented by Trevor Zubeck, consultant with Agri Industries Inc. An Environmental Assessment for this Application was completed on February 22, 2021.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application to Change an Existing Irrigation Water Right, Form 606
- Attachments
- Signed authorization of Randy Melville for water to be used on a portion of property that he owns.
- Maps
 - Google Earth aerials showing secondary point of diversion from Two Leggins Canal, conveyance pipelines, current place of use, and proposed place of use.

- Copy of map from water right file 43P 86260-00 application materials to show the historic place of use.
- Letter from Carolyn Sime, Montana Sage Grouse Habitat Conservation Program Manager, to Stanley Melville, Applicant, dated June 10, 2020.

Information Received after Application Filed

- Copy of application signed by A.L. Melville, Personal Representative for the Estate of Vernard Melville and copy of documentation appointing A.L. Melville as the Personal Representative of the Will and Estate of Vernard Melville, received February 2, 2021. Stanley Melville is acting as a manager for agricultural operations on the property on behalf of the Estate, so correspondence for this application will also be sent to Stanley Melville.
- Email communication with project consultant for Agri Industries Inc, Trevor Zubeck, confirming the proposed acres for irrigation and plans for measuring the diverted flow rate and volume, dated January 28, 2021 – February 4, 2021.
- Email from Melissa Schaar, Hydro-Sciences Supervisor with the DNRC Water Management Bureau, dated Wednesday February 3, 2021, indicating that modeling of the timing of return flows is not required unless a valid objection is received.
- Memo outlining differences in information provided in the Technical Report prepared by the Department dated February 10, 2021 and the Preliminary Determination to Grant.
- Email communication dated March 2, 2021, with consultant for Agri Industries Inc, Trevor Zubeck, regarding differences between the Technical Report and Preliminary Determination.

Information within the Department's Possession/Knowledge

- DNRC Water Right records
- Documents in the file for water right to be changed, Provisional Permit 43P 86260-00.
- NAIP Aerial Imagery of Sections 3 and 4, T1S, R33E, dated 2009, 2011, 2013, and 2015.
- Google Earth Aerial Imagery of Sections 3 and 4, T1S, R33E dated August 18, 1996, August 29, 2006, November 20, 2011, June 16, 2013, and March 19, 2016.
- Two Leggins Canal Capacity Study Reserved Water Delivery Assessment by R. Perkins (December 2009)
- Big Horn Conservation District Change Application 43P 30069516 referenced for Two Leggins Canal Conveyance Loss Estimate.

• The Department also routinely considers the following information. The following information is not included in the administrative file for this application but is available upon request. Please contact the Billings Regional Office at 406-247-4422 to request copies of the following documents.

- Consumptive Use Methodology Memo updated March 17, 2010.
- Historic Diverted Volume Memo dated September 13, 2012.
- Return Flow Memo dated April 1, 2016.
- Distributing Conveyance Loss on Multiple User Ditches Memo dated February 14, 2020.

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, part 4, MCA). NOTE: Department or DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; GPD means gallons per day; AF means acre-feet; AC means acres; AF/YR means acre-feet per year; AU means animal unit; and POD means point of diversion.

WATER RIGHT TO BE CHANGED

FINDINGS OF FACT

1. The Applicant seeks to change Provisional Permit 43P 86260-00. The priority date for 43P 86260-00 is June 29, 1993. The permitted flow rate is 1,500 GPM up to 486.00 AF for 162 AC of sprinkler irrigation. The point of diversion is the headgate for Two Leggins Canal on the Bighorn River located in Govt Lot 3 in the NWSESE Section 20, T2S, R33E, with a period of diversion and period of use from April 15 through October 15. The verified place of use is 162 AC: 38 AC in the NWSW and 24 AC in the SWSW Section 3 and 78 AC in the E2SE and 22 AC in the E2W2SE Section 4, all in T1S, R33E, Big Horn County. The place of use is approximately 2.5 miles northwest of Hardin, MT.

Table 1: WATER RIGHT PROPOSED FOR CHANGE

WR Number	Purpose	Flow Rate	Volume	Period of Use	Point of diversion	Place of use	Priority date
43P 86260-00	Irrigation (162 AC)	1,500 GPM	486.00 AF	04/15 – 10/15	Govt Lot 3 NWSESE Sec 20 T2S R33E Big Horn Co	SW Sec 3 & SE Sec 4 T1S R33E Big Horn Co	06/29/1993

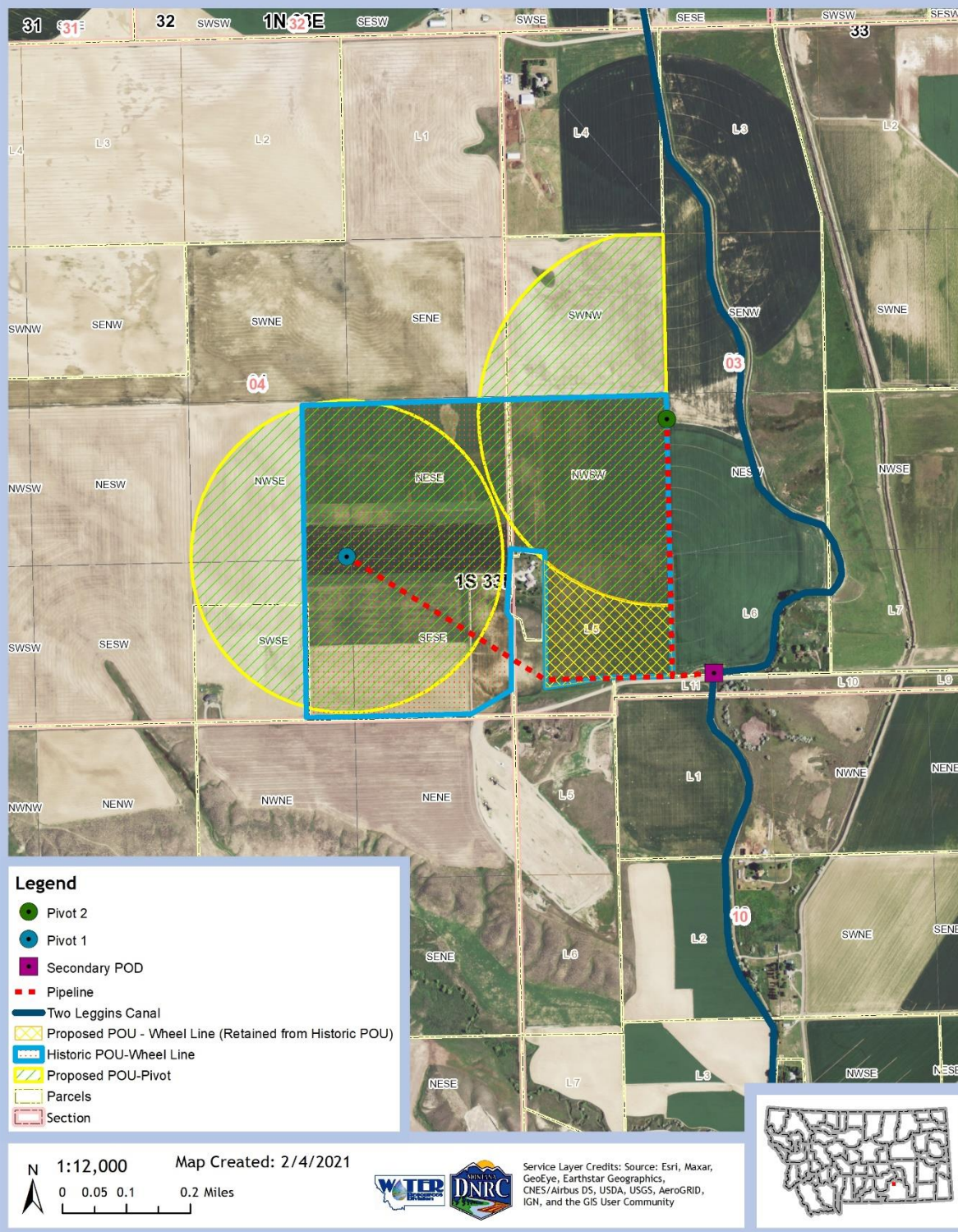
2. There are no supplemental water rights for the places of use involved in this change.
3. There have been no previous change authorizations on water right 43P 86260-00.

CHANGE PROPOSAL

FINDINGS OF FACT

4. The Applicant proposes to change the place of use from 162 AC historically irrigated using a wheel line sprinkler system to 207 AC using two center pivot sprinklers and 16 AC of retained wheel line irrigation for a total of 223 AC. The pivot in the SE of Section 4, T1S, R33E covers 120 AC. This pivot (Pivot 1) has been operational since 2014 and the change authorization will bring the place of use for the pivot into compliance. The proposed pivot (Pivot 2) in Section 3, T1S, R33E will cover 87 AC. The Applicant will continue to irrigate 16 AC in the SWSW of Section 3, T1S, R33E by wheel line irrigation. The Applicant proposes to measure the flow rate and volume of water diverted to ensure the proposed change will not enlarge the flow rate or the historic consumptive use of the right.
5. The proposed place of use constitutes an enlargement of approximately 61 AC. The new place of use overlaps 147 AC of the historic place of use and includes 76 AC of new irrigation. 15 AC previously irrigated by the wheel lines will no longer be irrigated under the center pivots. The Applicant proposes to increase the acres irrigated without increasing the flow rate or historic consumptive use by spreading less water over more acres.
6. The Applicant proposes to divert up to 980 GPM from the Bighorn River at the Two Leggins Canal headgate located in Govt Lot 3 in the NWSESE Section 20, T2S, R33E. The point of diversion will not change. After being conveyed approximately 10.5 miles (55,440 feet) via the Two Leggins Canal, water will be pumped from the canal at a secondary point of diversion in the SWSESW Section 3, T1S, R33E via two pumps through a pipeline system to the places of use. The following map shows the project location including the historic place of use for wheel line irrigation and the proposed place of use for the pivots and retained wheel line irrigation as well as conveyance facilities.

43P 30149944 - Melville



7. The Applicant proposes to distribute water over the expanded acres until the amount of water diverted equals the historic consumptive use of 333.43 AF. The flow rate and volume will be measured using two McCrometer flowmeters at the pumpsites to ensure the authorized flow rate and volume are not exceeded. Once the historic consumptive use is reached, the Applicant will cease diversion for the year. The Department will add a water measurement condition to the authorization. The condition will limit the diverted volume based on the amount historically consumed. The Department will apply the following conditions on the Change Authorization to ensure there is no increase in beneficial water use.

WATER USE MEASUREMENT-UNIQUE TYPE

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED MEASURING DEVICE AT EACH PUMP OR NEAR EACH PUMP ON THE PIPELINE TO THE PIVOTS. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. THE APPROPRIATOR SHALL KEEP WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED FROM APRIL 15 TO OCTOBER 15. THE WATER USE RECORDS SHALL BE COMPILED AND SUBMITTED TO THE DEPARTMENT BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR.

FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BILLINGS WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL ENSURE EACH MEASURING DEVICE IS MAINTAINED SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

IMPORTANT INFORMATION

THE DIVERTED FLOW RATE SHALL NOT EXCEED 980 GPM. DIVERSION SHALL CEASE WHEN THE TOTAL DIVERTED VOLUME MEASURED AT THE METERS REACHES 120,721,278.5 GALLONS OR 370.48 AF IN ANY YEAR.

CHANGE CRITERIA

8. The Department is authorized to approve a change if the applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by a preponderance of the evidence. Matter of Royston, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an applicant's burden to prove change criteria by a preponderance of evidence is "more probably than not."); Town of Manhattan v. DNRC, 2012 MT 81, ¶8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in §85-2-402(2), MCA, are:

(2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:

(a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.

(b) The proposed means of diversion, construction, and operation of the appropriation works are adequate, except for: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

(c) The proposed use of water is a beneficial use.

(d) The applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water. This subsection (2)(d) does not apply to: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

9. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. E.g., Hohenlohe, at ¶¶ 29-31; Town of Manhattan, at ¶8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

HISTORIC USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historic Use

10. Historically, water for Provisional Permit 43P 86260-00 was diverted from the Bighorn River via the Two Leggins Canal headgate located in Govt Lot 3 in the NWSESE Section 3, T2S, R33E, Big Horn County. The water was conveyed approximately 10.5 miles through the Two Leggins Canal to a secondary diversion in the SWSESW Section 3, T1S, R33E, Big Horn County. Based on the Project Completion Notice, water was pumped from the secondary diversion sump using two Berkley B32PL pumps, one with a 30 HP motor and 635 GPM capacity and one with a 40 HP motor and 865 GPM capacity. The permit was issued for a flow rate of 1,500 GPM based on system capacity. Water was conveyed through 1,920 feet of 10 inch PIP, 2,130 feet of 8 inch PIP, and 740 of 6 inch PIP pipeline from the pumps to wheel line irrigation systems in the SW Section 3, T1S, R33E and the SE Section 4, T1S, R33E. The wheel line systems operated at 65 PSI with 133 heads. The period of diversion and period of use was April 15 to October 15. The wheel line system was typically run 4 days on and 3 days off. The permit was issued for irrigation on 162 AC: 40 AC in the NWSW Section 3, 22 AC in the SWSW Section 3, 20 AC in the SENE Section 4, and 80 AC in the E2SE Section 4 all in T1S, R33E, Big Horn County. Based on the map submitted with the Project Completion Notice and examination of NAIP and Google Earth aerial imagery, the place of use was verified as 162 AC: 38 AC in the NWSW and 24 AC in the SWSW Section 3 and 78 AC in the E2SE and 22 AC in the E2W2SE Section 4, all in T1S, R33E, Big Horn County.

11. Provisional Permit 43P 86260-00 was issued May 8, 1995. A Project Completion Notice and Reinstatement Request were received January 5, 2012. According to the Project Completion Notice all components necessary for the project to be completed were installed and operational as of the spring of 1996. This is supported by aerial imagery and documentation submitted with the Project Completion Notice and Reinstatement Request including an irrigation pump and electric service agreement dated June 19, 1995 and electric billing and payment records from 2005 to 2011. The permit was reinstated January 25, 2013 and verified on January 12, 2021.

12. The historic flow rate for 43P 86260-00 is 1,500 GPM based on system design information provided on the Project Completion Notice.

13. There are no supplemental rights for 43P 86260-00.
14. Water right 43P 86260-00 has been used consistently for sprinkler irrigation since the permit was granted.
15. The historic consumptive use was calculated by the Department using Methodology in ARM 36.12.1902. Based on 162 AC, an IWR Seasonal Alfalfa Evapotranspiration of 27.46 inches for wheel line irrigation at Hardin, MT, and a Big Horn County management factor of 78.7% for 1973-2006, the consumptive use is 291.75 AF ($162 \text{ AC} \times 27.46 \text{ inches}/12 \text{ AF/AC} \times .787 = 291.75 \text{ AF}$). The Department adds 10% of field applied volume to account for irrecoverable losses in sprinkler irrigation systems. Using a 70% efficiency, the irrecoverable losses are $291.75 \text{ AF}/0.70 \times 0.10 = 41.68 \text{ AF}$. The total historic consumptive volume including irrecoverable losses is $291.75 \text{ AF} + 41.68 \text{ AF} = 333.43 \text{ AF}$.
16. The historic consumptive use, not including irrecoverable losses is 291.75 AF. Using an irrigation efficiency of 70 percent for wheel line irrigation, the field applied volume is $291.75 \text{ AF}/0.70 = 416.79 \text{ AF}$.
17. As of 2021, Two Leggins Canal has 59 active water rights totaling over 1,720.38 CFS from the Bighorn River. According to the Two Leggins Canal Study by Roger Perkins of Aquoneering (2009) the capacity of Two Leggins Canal is 500 CFS at the headgate. Many of the claims on Two Leggins Canal are duplicates, claiming acres that are already being supplied via the Two Leggins Water Users Association water right. The Two Leggins Water Users Association alone holds nine water rights with a total flow rate of 1,540 CFS. Several of these water rights are supplemental or multiple uses of the same right. Therefore, conveyance losses on Two Leggins Canal cannot be calculated using Department methods described in the Consumptive Use Methodology Memo or the Distributing Conveyance Loss on Multiple User Ditches Memo. The total historic diverted volume is 486 AF. For this application, conveyance losses are taken as 69.21 AF, calculated as the difference between on historic diverted volume and total field applied volume ($486 \text{ AF} - 416.79 \text{ AF} = 69.21 \text{ AF}$). The conveyance losses are approximately 17 percent of the total field applied volume. This is consistent with the canal conveyance loss estimates for Two Leggins Canal used for Big Horn Conservation District change authorization 43P 30069516.

18. Table 2 shows the historic use of the water right proposed for change.

Table 2. Historic Use of Provisional Permit 43P 86260-00

WR #	Priority Date	Diverted Volume	Flow Rate	Purpose (Total Acres)	Consump. Use	Place of Use	Point of Diversion
43P 86260-00	6/29/1993	486 AF*	1,500 GPM	Irrigation 162 AC	333.43 AF	SW Sec 3 & SE Sec 4 T1S R33E	Govt Lot 3 NWSESE Sec 20 T02S R33E

*Historic diverted volume differs from the historic diverted volume indicated in the Technical Report dated 2/10/2021. Historic diverted volume cannot exceed the permitted volume.

FINDINGS OF FACT – Adverse Effect

19. A pivot (Pivot 1) was installed to replace wheel line irrigation in the SE Section 4, T1S, R33E, Big Horn County, and has been operational since 2014. Pivot 1 irrigates an area of 120 AC: 31 AC in the NWSE, 31 AC in the SWSE, 29 AC in the NESE, and 29 AC in the SESE. The pivot overlaps approximately 80 AC of the place of use historically irrigated by wheel line in Section 4, T1S, R33E. Approximately 20 AC of the place of use historically irrigated by wheel line in Section 4 are no longer irrigated under Pivot 1. Approximately 40 AC in the W2SE Section 4 are covered by the pivot that were not historically irrigated by the wheel line system. The pump supplying the pivot has a flow rate of 980 GPM and conveys water through approximately 3,335 feet of 8 inch buried pipeline. Since Pivot 1 was installed, irrigation has been rotated between watering through the pivot in Section 4 and wheel lines in Section 3. The Pivot was typically run for 2 days on and 2-3 days off and the wheel lines were typically run for 4 days on and 3 days off. The change in place of use associated with the installation of the pivot in Section 4 will be considered along with the proposed new pivot in Section 3 through this change application.

20. The proposed pivot in Section 3 will cover approximately 87 AC: 34 AC in the SWNW, 39 AC in the NWSW, 8 AC in the SWSW of Section 3; 2 AC in the SENE and 4 AC in the NESE of Section 4 all in T1S, R33E, Big Horn County. The pivot will overlap approximately 51 AC historically irrigated by wheel line in Section 3 and Section 4. Approximately 36 AC will be covered by the proposed pivot that were not historically irrigated by wheel line irrigation: 34 AC

in the SWNW Section 3 and 2 AC in the SENE Section 4. A separate pump will be used for the pivot in Section 3. The proposed pump to supply the pivot in Section 3 will use a flow rate of 700 GPM.

21. The Applicant proposes to continue wheel line irrigation on 16 AC in the SWSW Section 3, T1S, R33E over the acres historically irrigated by wheel line that will not be covered by the new pivot in Section 3. The wheel line irrigation in Section 3 will be supplied by the same pump and a portion of the pipeline that supplies the pivot in Section 4 (Pivot 1).

22. The Applicant proposes to add two McCrometer flow meters to their system, one for each pump, to ensure they do not exceed their historic use. Once the diverted volume needed to achieve their historic consumed volume has been diverted they will shut their system down for the year. The historic consumptive use is 333.43 AF. With an 80% efficient system and 10% irrecoverable losses for sprinkler systems, the diverted amount, that would result in the same historical consumptive use, would be $333.43/0.90 = 370.48$ AF. Based on the conveyance loss calculations used for historic diverted volume (FOF 17), the conveyance losses from Two Leggins Canal will be 17 percent of 370.48 AF or 62.98 AF. Therefore, the total diverted amount from Bighorn River would be $370.48 \text{ AF} + 62.98 \text{ AF} = 433.46 \text{ AF}$. Since the Applicant proposes to install McCrometer flowmeters at the pumpsite, the conveyance losses from Two Leggins Canal will have occurred prior to measurement so the maximum applied volume as read on the meters will be 370.48 AF.

23. The Department will apply the following conditions on the Change Authorization to ensure there is no increase in consumptive use.

WATER USE MEASUREMENT-UNIQUE TYPE

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED MEASURING DEVICE AT EACH PUMP OR NEAR EACH PUMP ON THE PIPELINE TO THE PIVOTS. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. THE APPROPRIATOR SHALL KEEP WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED FROM APRIL 15 TO OCTOBER 15. THE WATER USE RECORDS SHALL BE COMPILED AND SUBMITTED TO THE DEPARTMENT BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR.

FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BILLINGS WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL ENSURE EACH MEASURING DEVICE IS MAINTAINED SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

IMPORTANT INFORMATION

THE DIVERTED FLOW RATE SHALL NOT EXCEED 980 GPM. DIVERSION SHALL CEASE WHEN THE TOTAL DIVERTED VOLUME MEASURED AT THE METERS REACHES 120,721,278.5 GALLONS OR 370.48 AF IN ANY YEAR.

24. The Applicant proposes to expand the place of use to 223 AC, an increase of 61 AC over historic use. They propose to distribute water over the expanded acres until the amount of water diverted equals the historic consumptive use of 333.43 AF. The Department calculates total diverted volume as the consumptive use divided by the on-field efficiency plus conveyance losses. Based on full service irrigation of 223 AC, an IWR for sprinkler irrigation in Hardin, MT of 29.96 inches, and Big Horn County management factor of 88.1%, the consumptive volume for the proposed use would be 490.50 AF ($223 \text{ AC} \times 29.96 \text{ inches}/12 \text{ AF/AC} \times .881 = 490.50 \text{ AF}$). The Department adds 10% of field applied volume to account for irrecoverable losses in sprinkler irrigation systems. Using an 80% efficiency for center pivot sprinkler irrigation, the irrecoverable losses are $490.50 \text{ AF}/0.80 \times .10 = 61.31 \text{ AF}$. The total consumptive volume calculated by the Department including irrecoverable losses is $490.50 \text{ AF} + 61.31 \text{ AF} = 551.81 \text{ AF}$. At full service irrigation on all 223 AC, the 551.81 AF proposed consumptive use would be 218.38 AF greater than the 333.43 AF historic consumed volume. The Applicant proposes to cease diversion when the diverted volume reaches 433.46 AF to achieve the historic consumptive use based on system efficiency and losses. Since the Applicant proposes to install McCrometer flowmeters at the pumpsite to measure volume, the conveyance losses from Two Leggins Canal will have occurred prior to measurement so the maximum applied volume as read on the meters will be 370.48 AF to achieve the historic consumptive use based on system efficiency and losses.

25. The pump for proposed Pivot 1 and the retained wheel line irrigation uses 980 GPM and the pump for proposed Pivot 2 will use 700 GPM. The pivots will not be used at the same time

so the flow rate used will not exceed 980 GPM. The proposed change will not enlarge the flow rate diverted or the consumptive use of the right. Return flows will enter back into the source where they have historically returned. Since the permit authorized 1,500 GPM, a flow rate of at least 520 GPM will be left instream and available to downstream appropriators from April 15 to October 15.

26. The hydraulically connected surface waters for this application would be the Bighorn River. The rate and timing of return flows in the Bighorn River will change as a result of the conversion from wheel line to center pivot sprinkler irrigation. The return flow under historic practices is 83.36 AF, calculated as the difference between the historic field applied volume and historic consumptive use volume ($416.79 \text{ AF} - 333.43 \text{ AF} = 83.36 \text{ AF}$). The difference in return flow under new practices is 46.31 AF, calculated as the historic return flow minus the difference between the new field applied volume that results in the same historic consumptive use and the historic consumptive volume ($83.36 \text{ AF} - (370.48 \text{ AF} - 333.43 \text{ AF}) = 46.31 \text{ AF}$). Return flow volume did and will continue to accumulate in the Bighorn River only. The historic return flows begin accreting as the Bighorn River enters Section 2, T1N, R33E and gradually increase to the total relative amounts. 52.54 AF will be left instream based on the historic diverted volume, 486 AF, minus the proposed diverted volume, 433.46 AF. According to Department policy (Return Flows Memo dated April 1, 2016) monthly volumes that returned to hydraulically connected surface waters under historic practices will not be modeled unless the application receives an objection because the proposed change will not enlarge the flow rate or consumptive use of the original right, return flows will enter back into the source where they have historically returned upstream of or at the location of the next downstream appropriator and water will be left instream so historically diverted flows are available during the historic period of diversion. For the purposes of this application, a DNRC hydrospecialist analyzed whether return flows would enter back into the source prior to or upstream of the next downstream appropriator or whether the historically diverted water that will be left instream after the change is available during the period of diversion either below the point of diversion or where return flows accrued to the source. In this instance, both criteria are met. Therefore, monthly volumes that have and will return to hydraulically connected surface waters will be modeled only if the application receives a valid objection.

BENEFICIAL USE

FINDINGS OF FACT

27. Applicant proposes to use water for sprinkler irrigation. Irrigation is a recognized beneficial use under §85-2-102, MCA.

28. Applicant proposes to use up to 980 GPM flow rate up to 433.46 AF diverted volume. The flow rate is based on the system design information provided by the Applicant. The pump supplying Pivot 1 and the retained wheel line irrigation uses a flow rate of 980 GPM and has been operational since 2014. The pump used for proposed Pivot 2 will have a flow rate of 700 GPM. Only one pivot will be operated at a time. The diverted volume of 433.46 AF was calculated using efficiency and consumptive use calculations in Administrative Rule and Department policy (FOF 22). This is less than the Department standard for Climate Area 1 but the Applicant wishes to spread the water thinner to increase the number of acres irrigated. The Department will apply the following conditions on the Change Authorization to ensure there is no increase in beneficial water use.

WATER USE MEASUREMENT-UNIQUE TYPE

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IMPORTANT INFORMATION

THE DIVERTED FLOW RATE SHALL NOT EXCEED 980 GPM. DIVERSION SHALL CEASE WHEN THE TOTAL DIVERTED VOLUME MEASURED AT THE METERS REACHES 120,721,278.5 GALLONS OR 370.48 AF IN ANY YEAR.

ADEQUATE DIVERSION

FINDINGS OF FACT

29. The proposed system utilizes the Two Leggins Canal headgate and ditch system, an existing secondary diversion sump and pumpsite, and portions of the conveyance pipeline that previously supplied the wheel lines. There will be no change in the operation of the primary diversion and conveyance through Two Leggins Canal. At the secondary diversion, two separate pumps will be utilized, one to supply each pivot. An existing pump operating with a flow rate of 980 GPM conveys water through 3,335 feet of buried 8 inch pipeline to the pivot in Section 4 (Pivot 1) and will also supply water to the 16 AC of wheel line irrigation that will be retained in the SWSW Section 3, T1S, R33E. Pivot 1 irrigates 120 AC in the SE Section 4, T1S, R33E and has been in operation since 2014. The proposed new pivot in Section 3 was designed by Agri Industries Inc, an irrigation supply dealer in Billings, MT. A new 40 HP vertical turbine pump will replace the 30 HP pump previously used to convey water to wheel lines in Section 3. The larger HP pump is needed to provide adequate flow and pressure for the pivot design. This pump will be used to carry water at a flow rate of 700 GPM through 1,500 feet of existing 8 inch 80lb PIP pipeline and an additional 1,000 feet of new 8 inch 80lb PIP pipeline to the new pivot in Section 3 (Pivot 2). A Valley Pivot 1513 feet long will cover an area of approximately 87 AC and utilize Nelson rotator sprinklers with 15 PSI pressure regulators to ensure uniform water application across the entire field. The Applicant proposes that only pivot will be used at a time. Pivot usage will typically be 2 days on and 2-3 days off. The pump supplying water to the pivot in Section 4 and wheel line irrigation in Section 3 covers 136 AC and provides approximately 7.21 GPM/AC. The proposed pivot in Section 3 covers 87 AC and provides approximately 8.05 GPM/AC. The flow rate and volume used will be tracked using two McCrometer flowmeters at the pumpsites to ensure the authorized flow rate and volume are not exceeded.

POSSESSORY INTEREST

FINDINGS OF FACT

30. According to Department of Revenue records, Vernard Melville is the legal owner of parcels appurtenant to the place of use. A.L. Melville, Personal Representative for the Estate of Vernard Melville, signed the affidavit on the application form affirming the applicant has possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. Stanley Melville is handling agricultural operations on behalf of the Estate of Vernard Melville so correspondence regarding the application will also be sent to him. A portion of the place of use is appurtenant to property owned by Randy Melville. Written consent from Randy Melville for the pivot to be used on a portion of property that he owns was submitted with the application. (Department file)

CONCLUSIONS OF LAW

HISTORIC USE AND ADVERSE EFFECT

31. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. McDonald v. State, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986)(beneficial use constitutes the basis, measure, and limit of a water right); Featherman v. Hennessy, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911)(increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940)(appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a new priority date junior to intervening water uses); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924)(“quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within

a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only”); Town of Manhattan, at ¶ 10 (an appropriator’s right only attaches to the amount of water actually taken and beneficially applied); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pg. 9 (2011)(the rule that one may change only that to which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions); In the Matter of Application to Change a Water Right No. 411 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004).¹

32. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 96 P. 727, 731 (1908); Quigley, 110 Mont. at 505-11, 103 P.2d at 1072-74; Matter of Royston, 249 Mont. at 429, 816 P.2d at 1057; Hohenlohe, at ¶¶43-45.²

33. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the “historic use” of the water right being changed. Town of Manhattan, at ¶10 (recognizing that the Department’s obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not

¹ DNRC decisions are available at:

http://www.dnrc.mt.gov/wrd/water_rts/hearing_info/hearing_orders/hearingorders.asp

² See also Holmstrom Land Co., Inc., v. Newlan Creek Water District, 185 Mont. 409, 605 P.2d 1060 (1979); Lokowich v. Helena, 46 Mont. 575, 129 P. 1063(1913); Thompson v. Harvey, 164 Mont. 133, 519 P.2d 963 (1974)(plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); McIntosh v. Graveley, 159 Mont. 72, 495 P.2d 186 (1972)(appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909)(successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, Gassert v. Noyes, 18 Mont. 216, 44 P. 959(1896)(change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff’s subsequent right).

include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.³ A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. Quigley, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); Royston, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); Hohenlohe, at ¶44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9, 1985)(evidence of historic use must be compared to the proposed change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).⁴

³A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under §85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. §85-2-234, MCA

⁴ Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)("[O]nce an appropriator exercises his or her privilege to change a water right ... the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right ... which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right."); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo., 1999); Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation"); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right ... he shall file a petition requesting permission to make such a change The change ... may be allowed provided that the quantity of water transferred ... shall not exceed the amount of water historically diverted

34. An applicant must also analyze the extent to which a proposed change may alter historic return flows for purposes of establishing that the proposed change will not result in adverse effect. The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its use and the water is subject to appropriation by others. E.g., Hohenlohe, at ¶44; Rock Creek Ditch & Flume Co. v. Miller, 93 Mont. 248, 17 P.2d 1074, 1077 (1933); Newton v. Weiler, 87 Mont. 164, 286 P. 133(1930); Popham v. Holloron, 84 Mont. 442, 275 P. 1099, 1102 (1929); Galiger v. McNulty, 80 Mont. 339, 260 P. 401 (1927); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909); Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731; Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; In the Matter of Application for Change Authorization No. G (W)028708-411 by Hedrich/Straugh/Ringer, DNRC Final Order (Dec. 13, 1991); In the Matter of Application for Change Authorization No. G(W)008323-G76I By Starkel/Koester, DNRC Final Order (Apr. 1, 1992); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004); Admin. R.M. 36.12.101(56)(Return flow - that part of a diverted flow which is not consumed by the appropriator and returns underground to its original source or another source of water - is not part of a water right and is subject to appropriation by subsequent water users).⁵

35. Although the level of analysis may vary, analysis of the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. Royston, 249 Mont. at 431, 816 P.2d at 1059-60; Hohenlohe, at ¶¶ 45-6 and 55-6; Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at

under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo,1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

⁵ The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana's water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell's flows are fed by irrigation return flows available for appropriation. Bitterroot River Protective Ass'n, Inc. v. Bitterroot Conservation Dist. 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, ¶¶ 22, 31,43, 198 P.3d 219, ¶¶ 22, 31,43(citing Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

731. Noted Montana Water Law scholar Al Stone explained that the water right holder who seeks to change a water right is unlikely to receive the full amount claimed or historically used at the original place of use due to reliance upon return flows by other water users. Montana Water Law, Albert W. Stone, Pgs. 112-17 (State Bar of Montana 1994).

36. In Royston, the Montana Supreme Court confirmed that an applicant is required to prove lack of adverse effect through comparison of the proposed change to the historic use, historic consumption, and historic return flows of the original right. 249 Mont. at 431, 816 P.2d at 1059-60. More recently, the Montana Supreme Court explained the relationship between the fundamental principles of historic beneficial use, return flow, and the rights of subsequent appropriators as they relate to the adverse effect analysis in a change proceeding in the following manner:

The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the “amount historically consumed” and the water that re-enters the stream as return flow. . . .

An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law—that an appropriator has a right only to that amount of water historically put to beneficial use—developed in concert with the rationale that each subsequent appropriator “is entitled to have the water flow in the same manner as when he located,” and the appropriator may insist that prior appropriators do not affect adversely his rights.

This fundamental rule of Montana water law has dictated the Department’s determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis, represents a key element of proving historic beneficial use.

We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe, at ¶¶ 42-45 (internal citations omitted).

37. The Department’s rules reflect the above fundamental principles of Montana water law and are designed to itemize the type evidence and analysis required for an applicant to meet its burden of proof. Admin.R.M. 36.12.1901 through 1903. These rules forth specific evidence and analysis required to establish the parameters of historic use of the water right being changed. Admin.R.M. 36.12.1901 and 1902. The rules also outline the analysis required to establish a

lack of adverse effect based upon a comparison of historic use of the water rights being changed to the proposed use under the changed conditions along with evaluation of the potential impacts of the change on other water users caused by changes in the amount, timing, or location of historic diversions and return flows. Admin.R.M. 36.12.1901 and 1903.

38. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. E.g., In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC., DNRC Proposal for Decision adopted by Final Order (2005). The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the location of diversion, it is essential that the change also not enlarge an existing right. See MacDonald, 220 Mont. at 529, 722 P.2d at 604; Featherman, 43 Mont. at 316-17, 115 P. at 986; Trail's End Ranch, L.L.C. v. Colorado Div. of Water Resources 91 P.3d 1058, 1063 (Colo., 2004).

39. The Department has adopted a rule providing for the calculation of historic consumptive use where the applicant proves by a preponderance of the evidence that the acreage was historically irrigated. Admin. R. M. 36.12.1902 (16). In the alternative an applicant may present its own evidence of historic beneficial use. In this case Applicant has elected to proceed under Admin. R.M. 36.12.1902. (FOF 15).

40. If an applicant seeks more than the historic consumptive use as calculated by Admin.R.M. 36.12.1902 (16), the applicant bears the burden of proof to demonstrate the amount of historic consumptive use by a preponderance of the evidence. The actual historic use of water could be less than the optimum utilization represented by the calculated duty of water in any particular case. E.g., Application for Water Rights in Rio Grande County 53 P.3d 1165 (Colo., 2002) (historical use must be quantified to ensure no enlargement); In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC., *supra*; Orr v. Arapahoe Water and Sanitation Dist. 753 P.2d 1217, 1223 -1224 (Colo., 1988)(historical use of a water right could very well be less than the duty of water); Weibert v. Rothe Bros., Inc., 200 Colo. 310, 317, 618 P.2d 1367, 1371 - 1372 (Colo. 1980) (historical use could be less than the optimum utilization "duty of water").

41. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of Beneficial Water Use Permit No. 43P 86360-00 of 486 AF diverted volume and 1,500 GPM flow rate with a consumptive use of 333.43 AF for irrigation on 162 AC. (FOF 10-18)

42. Based upon the Applicant's comparative analysis of historic water use and return flows to water use and return flows under the proposed change, the Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. §85-2-402(2)(b), MCA. (FOF 19-26)

BENEFICIAL USE

43. A change applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. §§85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: "[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . ." McDonald, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under §85-2-402, MCA, and new beneficial permits under §85-2-311, MCA. Admin.R.M. 36.12.1801. The amount of water that may be authorized for change is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court (2003) (*affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518); Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, Pg. 3 (2011)(citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet); Toohey v. Campbell, 24 Mont. 13, 60 P. 396 (1900)("The policy of the law is to prevent a person from acquiring exclusive control of a stream, or any part thereof, not for present and actual beneficial use, but for mere future speculative profit or advantage, without regard to existing or contemplated beneficial uses. He

is restricted in the amount that he can appropriate to the quantity needed for such beneficial purposes.”); §85-2-312(1)(a), MCA (DNRC is statutorily prohibited from issuing a permit for more water than can be beneficially used).

44. Applicant proposes to use water for irrigation which is a recognized beneficial use. §85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence irrigation is a beneficial use and that 433.46 AF of diverted volume and 980 GPM flow rate of water requested is the amount needed to sustain the beneficial use of irrigation for 223 AC. The requested volume is lower than the Department standard for irrigation because the Applicant proposes to expand acreage without increasing consumptive use. §85-2-402(2)(c), MCA (FOF 27-28)

ADEQUATE MEANS OF DIVERSION

45. Pursuant to §85-2-402 (2)(b), MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. This codifies the prior appropriation principle that the means of diversion must be reasonably effective for the contemplated use and may not result in a waste of the resource. Crowley v. 6th Judicial District Court, 108 Mont. 89, 88 P.2d 23 (1939); In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC (DNRC Final Order 2002)(information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies based upon project complexity; design by licensed engineer adequate).

46. Pursuant to §85-2-402 (2)(b), MCA, applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. (FOF 29)

POSSESSORY INTEREST

47. Pursuant to §85-2-402(2)(d), MCA, the Applicant must prove by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. See also Admin.R.M. 36.12.1802

48. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. (FOF 30)

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 43P 30149944 should be GRANTED subject to the following.

The Department determines that the Applicant may change 980 GPM up to 433.46 AF of 43P 86260-00 for irrigation from April 15 through October 15 each year on 223 AC as shown below:

34 AC	SWNW	Sec. 3	T1S	R33E	Big Horn County
39 AC	NWSW	Sec. 3	T1S	R33E	Big Horn County
24 AC	SWSW	Sec. 3	T1S	R33E	Big Horn County
31 AC	NWSE	Sec. 4	T1S	R33E	Big Horn County
31 AC	SWSE	Sec. 4	T1S	R33E	Big Horn County
33 AC	NESE	Sec. 4	T1S	R33E	Big Horn County
29 AC	SESE	Sec. 4	T1S	R33E	Big Horn County
2 AC	SENE	Sec. 4	T1S	R33E	Big Horn County

The application will be subject to the following conditions, limitations or restrictions.

WATER USE MEASUREMENT

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED MEASURING DEVICE AT EACH PUMP OR NEAR EACH PUMP ON THE PIPELINE TO THE PIVOTS. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. THE APPROPRIATOR SHALL KEEP WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED FROM APRIL 15 TO OCTOBER 15. THE WATER USE RECORDS SHALL BE COMPILED AND SUBMITTED TO THE DEPARTMENT BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR.

FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BILLINGS WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL ENSURE EACH MEASURING DEVICE IS MAINTAINED SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

IMPORTANT INFORMATION

THE DIVERTED FLOW RATE SHALL NOT EXCEED 980 GPM. DIVERSION SHALL CEASE WHEN THE TOTAL DIVERTED VOLUME MEASURED AT THE METERS REACHES 120,721,278.5 GALLONS OR 370.48 AF IN ANY YEAR.

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to §85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§85-2-307, and -308, MCA. If this Application receives a valid objection, it will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and §85-2-309, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection(s) and the valid objection(s) are conditionally withdrawn, the Department will consider the proposed condition(s) and grant the Application with such conditions as the Department decides necessary to satisfy the applicable criteria. E.g., §§85-2-310, -312, MCA.

DATED this 4th day of March, 2021.

/Original signed by Mark Elison/

Mark Elison, Regional Manager
Billings Regional Office
Department of Natural Resources
and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this _____ day of _____ 20____, by first class United States mail.

ESTATE OF VERNARD MELVILLE

%A.L. MELVILLE

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